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Music as Social Process: some aspects of the work of Christian Wolff

There is . . . an inevitable natural complexity in things . . .; and it cannot finally be precisely indicated or controlled or isolated. To insist on determining it totally is to make a dead object. The spatial element is unpredictably flexible (though one may decide to calculate particular segments) and comes to life only when activated by outside (indeterminable) interferences. The complete control of a work, were it possible at all, would render it utterly impenetrable, put an end to its existence.[1]

. . . a situation occurred when I had to produce quickly – for a concert by Frederic Rzewski and myself in 1956. I'd been writing extremely complicated pieces, and it was clear I wouldn't be able to finish in time. What we did was a kind of improvisation – the score dealt only with spaces of time and groups of notes from which we could select – and then I started doing other pieces like this. They'd have time-lengths and what was to happen within these, and they'd usually state the number of notes to be played. There might or might not be more details, and I'd give a wide range of instructions, from playing two particular notes within an eighth of a second to playing five notes from a wide selection within a minute – from nearly fixed to nearly free.[2]

In the case of *Duo II for Pianists*, structure, the division of the whole into parts, is indeterminate. (No provision is given by the composer for ending the performance.) Method, the note-to-note procedure, is also indeterminate. All the characteristics of the materials (frequency, amplitude, timbre, duration) are indeterminate within gamut limitations provided by the composer. The form, the morphology of the continuity, is unpredictable. One of the pianists begins the performance: the other, noticing a particular sound or silence which is one of a gamut of cues, responds with an action of his own determination from among given possibilities within a given time bracket. Following this beginning, each panist [sic] responds to cues provided by the other, letting no silence fall between responses, though these responses themselves include silences. Certain time brackets are in zero time. There is no score, no fixed relation of the parts. *Duo II for Pianists* is evidently not a time-object, but rather a process the beginning and ending of which are irrelevant to its nature. The ending, and the beginning, will be determined in performance, not by exigencies interior to the action but by circumstances of the concert occasion. If the other pieces on the program take forty-five minutes of time and fifteen minutes more are required to bring the program to a proper length, *Duo II for Pianists* may be fifteen minutes long. Where only five minutes are available, it will be five minutes long.

The function of each performer in the case of *Duo II for Pianists* is comparable to that of a traveler who must constantly be catching trains the departures of which have not been announced but which are in the process of being announced. He must be continually ready to go, alert to the situation, and responsible. If he notices no cue, that fact itself is a cue calling for responses indeterminate within gamut limitations and time brackets. Thus he notices (or notices that he does not notice) a cue, adds time bracket to time bracket, determines his response to come (meanwhile also giving a response), and, as the second hand of a chronometer approaches the end of one bracket and the beginning of the next, he prepares himself for the action to come (meanwhile still making an action), and, precisely as the second hand of a chronometer begins the next time bracket, he makes the suitable action (meanwhile noticing or noticing that he does not notice the next cue), and so on.[3]

If the history of the avant garde since 1945 can be seen as a succession of minor revolutions, reactions and revisions, then Christian Wolff's revolution was to introduce the social interaction of performers in performance as a significant compositional element. Although the nature and extent of this interaction has varied in Wolff's music over the period since he and Rzewski first performed *Duo for Pianists I* – probably in 1957, actually[4] – a recurrent characteristic of his work has been the creation of ensemble performance situations in which individual players must listen to one another's playing for information as to how to proceed. In this article I shall examine Wolff's development of this characteristic in his work, concentrating on the music he wrote between the late 1950s and the late 1960s, a period which begins with *Duo for Pianists I* and ends with the *Prose Collection*.

The late 1950s

In 1955 John Cage had written that

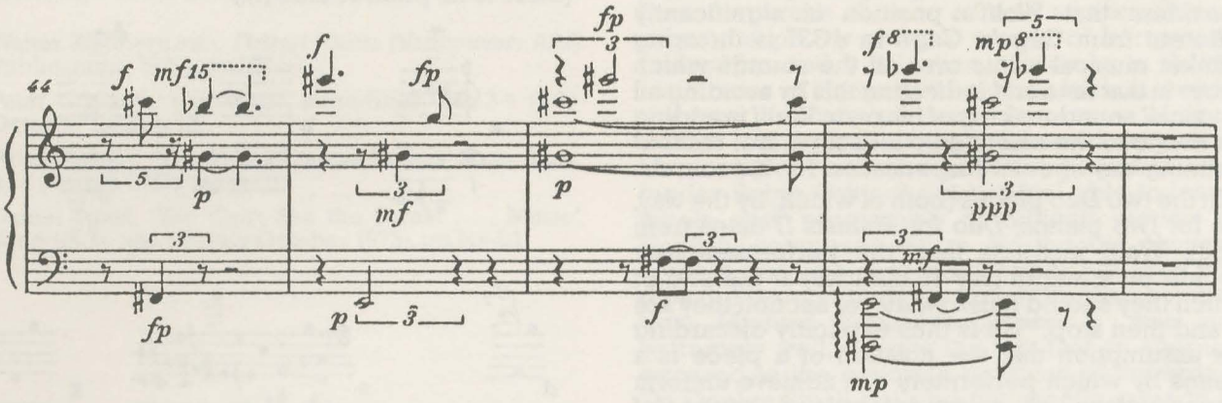
. . . since duration is the only characteristic of sound that is measurable in terms of silence, therefore any valid structure involving sounds and silences should be based, not as occidentally traditional, on frequency, but rightly on duration . . .[5]

Like Cage, who had in fact first made this observation many years earlier, Wolff regarded duration as the fundamental musical parameter. Just as Cage, in a piece like the First String Quartet (1950), deliberately invited the listener to focus his attention on the length of musical events by tightly restricting their variety, so Wolff – in works like *Trio I* for flute, trumpet and cello (1951), with its four different pitches, and *For Piano I* (1952), with its nine widely-scattered notes (Example 1) – used pitch and timbral restriction to clarify and emphasise the organisation of duration and reiteration. As he said later,

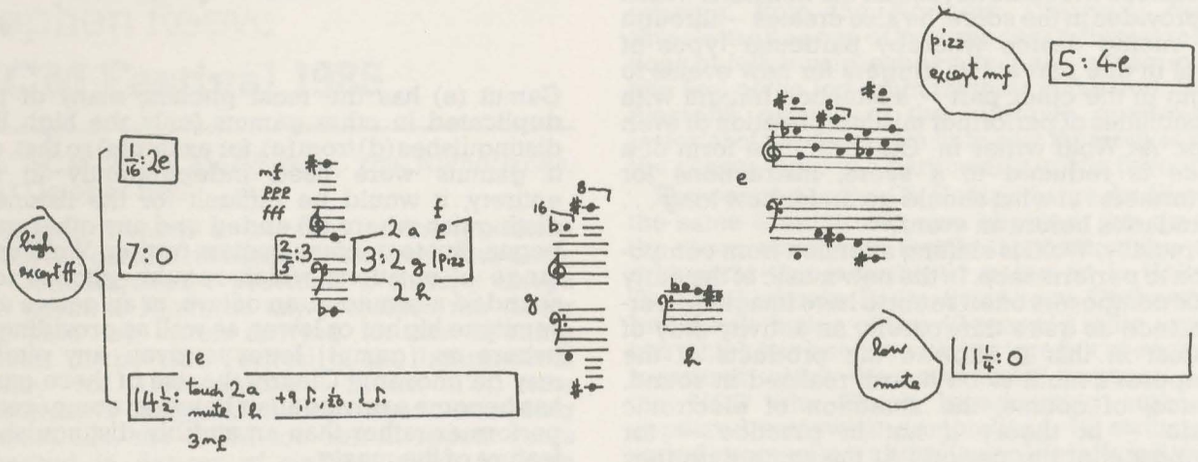
Around 1951-2 my pieces had very few pitches, resulting from exercises Cage had set me . . . what interested me was not so much the notes as their overlappings and combinations.[6]

At first sight, a comparison between *For Piano I* and *Duo for Pianists I* and *II* would suggest that it is this aspect of Wolff's music that the radical change in notation has most severely compromised. However, in his slightly later article 'On Form'[7] the composer demonstrates that the precompositional planning of works using the new notation was

Example 1 *For Piano I*, bars 44-8



Example 2 *Duo for Pianists II*, second piano part (extract)



every bit as complex as that for the traditionally notated pieces, requiring a labyrinthine series of operations on a matrix to produce the instructions for the performers. The beauty of the new method, and the reason it was first used (as the second quotation above, from the 1969 article/interview 'Taking Chances', makes clear), was that it removed the necessity for Wolff to realise these instructions once and for all. Where the matrix operations might produce a five-second musical event consisting of four sounds to be selected from pitch collection (e) (Example 2), in earlier pieces he would have had further work deciding which four sounds to use and where to place them within the five seconds. In the new notation it is enough to write '5:4e'.

At the same time as initiating a quick new way of composing and playing (nothing in Cage's, Morton Feldman's or Earle Brown's 'indeterminacy' is quite like this, as I shall demonstrate later), Wolff's experiment in his new notation seems to be a (tacit) acknowledgement of a truth about much of the new music of the first half of the 1950s. Put bluntly, the complexity of the compositional strategies employed, whether by Pierre Boulez or Cage, Karlheinz Stockhausen or Wolff, yielded music the appeal of which is based not so much on any Webernesque sophistication of note-to-note movement resulting from the use of these strategies as on the general qualities of performance activity involved in playing the pieces: scientific precision (Boulez' *Structures*, Book I), Zen and the Art of Keyboard Mastery (Cage's *Music of Changes*), manic activity (Stockhausen's *Klavierstück I*), stasis (Wolff's *For Piano I*). To observe this discrepancy between ends and means is not to criticise the music that resulted; what is interesting, and characteristic of each of these composers, are the different ways in which each subsequently achieved far greater resolution of creative intention and realisation. For Wolff the new notation did not involve a change in the sound of his music: the same delicate balance of single attacks, occasionally occurring in groups of near-simultaneities, and silence is maintained. It did, though, allow him to focus specifically on the notion of composition as the definition of performer activity and of the location of that activity in time. That he was relatively uninterested in which notes he used, finding their relationships more interesting, has already been indicated.

In 'How to Pass, Kick, Fall, and Run', Cage recounts the following anecdote:

> One day when the windows were open, Christian Wolff played one of his pieces at the piano. Sounds of traffic, boat horns, were heard not only during the silences in the music, but, being louder, were more easily heard than the piano sounds themselves. Afterward, someone asked Christian Wolff to play the piece again with the windows closed. Christian Wolff said he'd be glad to, but that it wasn't really necessary, since the sounds of the environment were in no sense an interruption of those of the music.[8]

This indicates that Wolff also doubted whether music should have an importance greater than that of any other sounds for the listener, thus questioning the whole concept of the inviolable completeness of the composition. In an intellectual

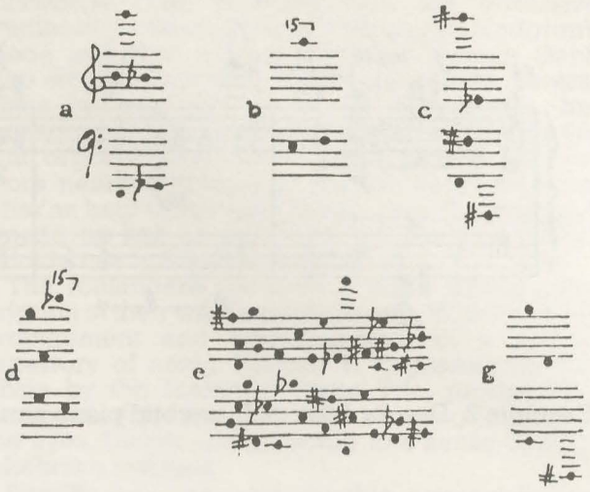
climate dominated by the ideas of the composer of *4'33"* (1952), this is not surprising, until one considers that Wolff's position is significantly different from Cage's. Cage in *4'33"* is throwing blanket musical status over all the sounds which occur in that time and indicating this by avoiding all 'musical' sound-making of his own; Wolff is adding his music to the existing soundscape, but without claiming any special dispensation for his sounds.

In the two *Duo* pieces (both of which, by the way, are for two pianos; *Duo for Pianists II* dates from 1958), Wolff instructs that 'the performers may decide on a length (say 15 minutes) at the end of which they should finish whatever section they are in and then stop'.[9] He is thus explicitly discarding the assumption that the notation of a piece is a means by which performers can achieve uniform reproductions of a predetermined series of musical images. Not only does he allow for performances which do not use all the notations which he provides in the score, he also creates – through the cueing device whereby particular types of event in one part act as triggers for new events to begin in the other part – a situation fraught with possibilities of performer misinterpretation or even error. As Wolff writes in 'On Form', 'the form of a piece is reduced to a score, instructions for performers . . . what should go on for how long . . . boundaries before an event'.[10]

Crucially, Wolff is shifting attention from composition to performance. In the new music of the early 1950s composers often seem to have imagined performance as quite transparent, an activity only of interest in that it allowed the products of the composer's mind to be heard, realised in sound. (Hence, of course, the attraction of electronic music – in theory if not in practice – for composers of the period.) At the same time they imagined these socially neutral performances to be happening against the background of absolute silence. The latter assumption Cage exploded in *4'33"*; the former assumption Wolff was probably the first to refute by creating, for *Duo for Pianists I*, a score which, since it is no more than 'instructions for performers', has no significance until it is used to activate them. For Wolff after 1956, performance is no longer a precise recreation of an already-finished work. To quote 'On Form' again, 'a piece is not played to exhibit its composed structure';[11] instead it is a dynamic social activity whose consequence is the creation of music.

The shift in attention generated by the change of notational, and therefore performance, practice initiated a gradual change in Wolff's compositional methods. To a limited extent change is already evident when one compares *Duo for Pianists I* with preceding works. In earlier compositions Wolff restricted his pitch material to single gamuts heard throughout the whole or part of a work. In *Duo for Pianists I* and subsequent pieces, however, not only does the superimposition of different gamuts make it virtually impossible for these to establish their individual identities for the listener, but Wolff often also instructs that only a few pitches of the gamut be sounded. In *For Pianist* (1959), for example, the gamuts used are as in Example 3:

Example 3 *For Pianist*, pitch sources (there is no pitch source (f)!)



Gamut (e) has the most pitches, many of them duplicated in other gamuts (only the high B flat distinguishes (d) from (e), for example) so that, even if gamuts were used independently in their entirety, it would be difficult for the listener to distinguish where (e) ended and any other gamut began. But to confuse matters further, Wolff uses a range of notations which require pitches to be sounded a semitone, an octave, or an octave and a semitone higher or lower, as well as providing that 'where no [gamut] letter is given, any pitch(es) may be chosen'.[12] Clearly the use of these gamuts has become a private affair between composer and performer rather than an audibly distinguishable feature of the music.

Yet, as was stated earlier, the change in notational practice from *For Piano* to *Duo for Pianists I* was not accompanied by wholesale change in the sound-world of Wolff's music. Although the extension of available pitches beyond the prescribed gamuts leads to a blurring of the identity of these gamuts beyond the point at which they might still be recognised, the sounds produced are still widely separated in time, with no metrical organisation apparent to the ear. Indeed, the move to a less aurally distinct system of pitch organisation allows Wolff to take further the philosophy, stated in 'On Form', that 'no distinction is made between the sounds of a "work" and sounds in general'.[13] In the conventionally-notated pieces, where pitch gamuts can be identified by ear, there is a profound contrast between the proliferation of 'sounds in general' and the delineation of sounds in Wolff's work; the sounds of the pieces after 1956 are much more haphazard, much more like those of nature. This in turn has the consequence that the listener, unable to perceive any schematic organisation behind what he hears, will tend to concentrate more on the intrinsic qualities of individual sounds or groups of sounds than on their significance as parts of an overall formal structure. The result is that, as in the music of Cage and Feldman, sounds are allowed to be themselves in a way that is rare, if not unknown, in any other composed western music. As Cage says in *For the Birds*,

> All I was able to identify was the arrival of a few sounds from time to time. I was transported to natural experiences, to my daily life when I am not listening to music, when sounds simply happen.[14]

Duos and duets

Clearly, use of the new notation required no sacrifice for Wolff, only gains, both aesthetic and practical; and in the compositions that follow its introduction one can see a gradual refinement of its possibilities and, in particular, a reduction of its complexities to those which directly serve the music's intentions. This is immediately apparent in a comparison between the two *Duo* pieces of 1957 and 1958 and the two *Duet* pieces of 1960 and 1961. (*Duet I* is for piano, four hands; *Duet II* is for horn and piano.)

In the *Duo* pieces emphasis is placed on the internal continuity of each player's part, with the overall continuity resulting from the simultaneous performance of these parts being left to chance. Wolff only prescribes that each player should begin a particular section of his part in response to the cue designated for that section. But in performing the *Duo* pieces, the composer says,

> I noticed right at the beginning of the experiment with Rzewski, that the thing that interested me most was in what way the choice of one performer was influenced by what the other one did. For example, one has ten seconds and one can choose three notes out of seven. So one has a little time to think what to do. Perhaps one has already thought of something beforehand; but ten seconds is a little time, and one is just about to do something when the other one plays something and one says, perhaps it would be better if I played *this* as a reply. So a reciprocal improvisation occurs, a controlled reciprocal reaction, a co-ordination created at that moment.[15]

In the *Duet* pieces Wolff develops notations which exploit this co-ordination more specifically. In the example from *Duet II* for horn and piano (Example 4), one of the six sections that make up the piece is shown. The six sections may, like those of the *Duos*, be played in any order, repeated or omitted. The sequence of sections is not to be determined beforehand; instead players must respond to one another's cues in performance. (The section shown is the only one that both players may start; the other sections are all cued by either horn or piano.) In the example, the pianist plays five sounds from pitch source (a), two of them attacked simultaneously; the dash through the 5 means '1) that the tones must be unequal (aperiodic) in some respect (e.g. duration or loudness) and 2) that the event as a whole . . . must be varied at each repetition of the section in which they occur'.[16] At the same time the horn, muted by one of 'two different kinds of mutes or muting', plays two notes, legato, the first either loud or soft or with a loud attack on an otherwise soft note, the second moderately quiet. Then the pianist plays a single note which is held until the horn plays a slightly flat low concert D. The next event is co-ordinated 'as closely as possible . . . without any intentional signals'.

The pianist next plays two notes of 'any duration from the shortest to medium (about one second)', releasing the second note as the horn enters, muted with the other mute, with a note from pitch source (b). As soon as the horn stops, the pianist plays another shortish note at the end of which the horn plays again, followed again by the pianist. The rest of the section continues, obeying the same rules, ending with an especially unpredictable event in which the last two horn sounds – one of any duration as high as possible, the other a shortish note a semitone above or below any note in pitch source (b) – are played immediately after a note of 'any duration from very long to medium' and the last of a group of three shortish notes, respectively.

Besides this much greater emphasis in the *Duets* on reactive playing, on listening and co-ordinating as carefully as possible, there is also a change from the *Duo* pieces in the use made of the pitch sources. In the *Duo* pieces the majority of notes use pitches from the sources, whereas in the *Duet* pieces notes using pitches from the sources are the exception (and in *Duet II*, where a pitch source is specified, the pitch chosen is in most cases to be modified by semitone or octave transposition). While it is just conceivable that the pitch sources in *For Pianist* and the *Duos* might make some subliminal impression on the listener, in the *Duets* this has become a statistical impossibility: their use has become utterly private and, in a notation where details of succession, dynamic, timbre and duration are now generally given note-by-note or group-by-group, to have pitch sources scattered across the page is graphically both cumbersome and anomalous.

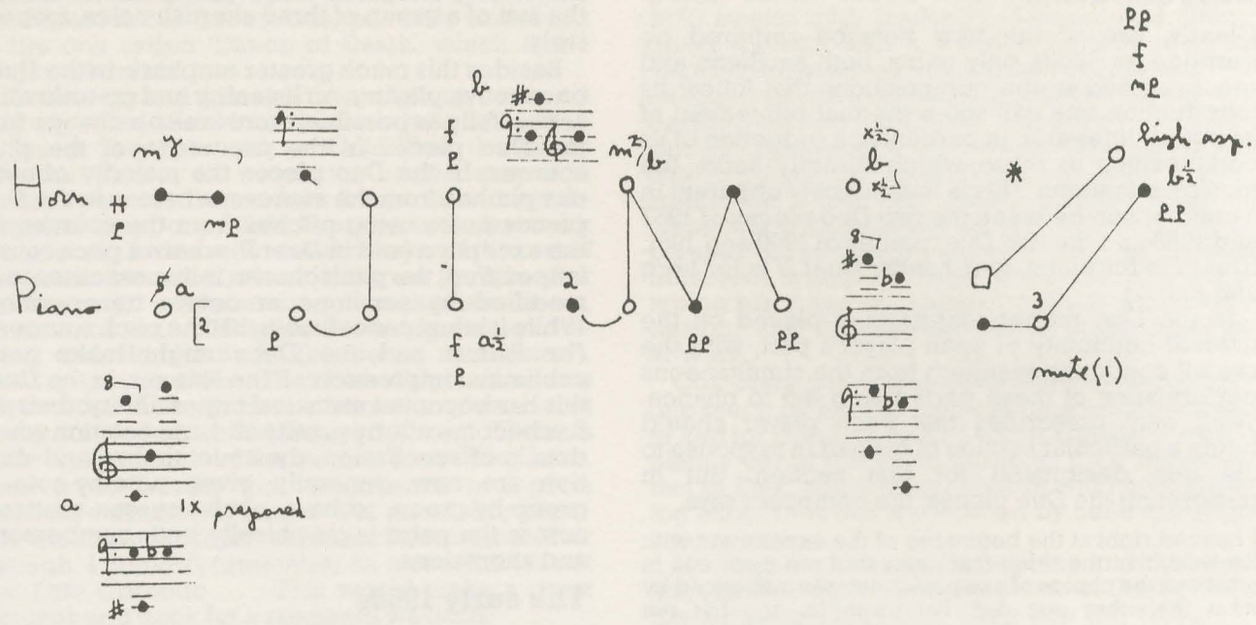
The early 1960s

In the compositions after the *Duets* the pitch sources therefore disappear. They are replaced – in, for example, *In Between Pieces* for three players using any sound sources (1963) – by clefless staves, mostly with one or two pitches, positioned immediately beside the note to which they refer. Examination of the pitches used, coupled with the realisation that they may be read in either treble or bass clef or, where neither falls within an instrument's range, transposed by at least two octaves, reveals that they have been given in this apparently more precise way not to impose any audible sense of pitch organisation on the music but rather to prevent the three players involved from keeping to too few pitches. In a situation where a player's attention is focused on fulfilling the co-ordinative demands of the notation, as well as effecting the timbral changes that *In Between Pieces* also demands, there is a danger that pitches may recur too regularly, a danger that Wolff thus counteracts. Interestingly, having established the type of pitch distribution he wants for the work by using staves on the first three pages of the score, Wolff then feels able to abandon them for the remaining one-and-a-half pages of the piece's first part.

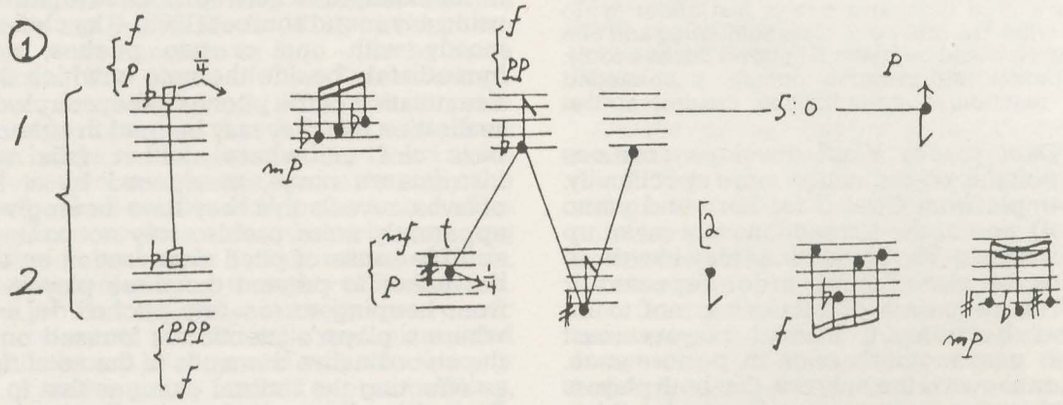
Other innovations of *In Between Pieces* can be seen to be the fruit of work on the performance of compositions using the interactive notation of the *Duets*. For example, on page 2 Player III begins with two sounds; these are followed immediately by two sounds from Player I, followed by one sound from Player II; Player III has to play another sound simultaneously with either the second or third sound he hears after his initial two sounds. Ten seconds after Player II's note, Player III plays four notes; seventeen seconds after Player II's note, Player I plays one note; Player II plays two notes directly after either the third, fourth or fifth note he hears. So while two players are involved in realising one type of notational instruction, the third player is waiting for a rather less predictable cue which will be the product of their activities.

The potential for error in a composition like *Duet II*, where each player must be prepared either to cue or be cued at the end of each section, is also recognised and exploited in the second part of *In Between Pieces*. Here the notations for each player

Example 4 *Duet II*, extract (horn at concert pitch)



Example 5 *Pairs*, opening phrase (parts 1 and 2)



indicate that sounds are to be co-ordinated in the ways used earlier in the work with sounds made by the other players: simultaneously; directly after; after a stated period; after a stated number of sounds. They do not, however, specify which player: Wolff instructs that

> notes should be read in sequence by each player, but the co-ordinations are with whatever sound each player hears next . . . This means that sometimes one player must proceed to another section so that another player still playing in the current one can finish.[17]

All these devices can be seen as further variants and sophistications of the two procedural methods central to performance practice in all Wolff's work after 1956: players are playing either independently of one another or in co-ordination with one another. Around these constants the composer can then introduce whatever other features he wishes in order to make a particular piece unique: the use of muting in *Duet II*, of timbral alteration in *In Between Pieces*, and so on. At the same time there is a general tendency towards a simpler notation, or rather towards a notation that is more readily readable in performance. The awkwardness of the graphic presentation of pitch sources at some distance from notations which refer to them has already been mentioned, but Wolff's representation of durational variations also undergoes modification. In the *Duos*, duration is entirely at the players' discretion, provided the given number of attacks occurs in the time available. In the *Duets*, three different note lengths are used (black notes are short to medium, square white notes are long, and round white notes are of any length); in *Pairs* for any two, four, six or eight players (1968) Wolff also uses semiquavers and quavers to indicate 'rapid' notes and notes 'about half as fast' as the 'rapid' notes (Example 5).

These modifications achieve the same sort of result in durational terms as was achieved by the innovations in pitch notation to be found in *In Between Pieces*. In both cases the more specific new indications are intended to counteract any tendency to sameness: to durations which are fairly short or long, to pitches in the mid-ranges of the instruments used. In so doing they allow the players more time in which to concentrate on co-ordination with one another and on the timbral and pitch inflections that the composer requires, without doing any violence to the overall qualities of Wolff's sound-world. Perhaps as importantly, they make the scores look more like 'normal' music and therefore more attractive to players beyond the inner circle of avant-garde players such as Cornelius Cardew, Rzewski, Kurt Schwertsik, David Tudor *et al.*, who were Wolff's principal interpreters at this time.

Prose compositions

It was with the *Prose Collection* (initially 1968-9), however, that Wolff made his most determined effort to involve a new pool of players in his music. In interview with Martin Daske, Wolff says of *For 1, 2 or 3 People* for any sound-producing means (1964) that it

> was not easy to perform, but it was really accessible to all those who seriously wanted to do it. And through this piece another idea came into my music: that I too wanted to make music for non-professionals, not only for virtuosi, but for lay people and people who had perhaps never played a musical instrument.[18]

Such an opportunity arose through the creation of the Scratch Orchestra in London in 1969, although Wolff had already begun the *Prose Collection* before Cardew produced the Scratch's Draft Constitution.

In the pieces that make up the *Prose Collection* no use is made of musical notations: instead, as the title suggests, these are all text pieces. In a sense this extreme restriction of means – no note-by-note instructions for co-ordinations, no prescription of pitch, duration or timbre – may seem a denial of every development that had gone before in Wolff's music. But Michael Nyman suggests that, instead, this restriction 'can be viewed as a tribute to the English musicians Wolff worked with during a stay in England in 1968'[19] and in particular to Cardew and John Tilbury: a tribute, because by leaving out all but the essential elements necessary to distinguish each piece in the collection, Wolff was acknowledging the commitment to, and understanding of, his music that could be expected both of these two musicians and of any others, professional or amateur, whom they might involve in performing the pieces.

As with *For 1, 2 or 3 People*, the pieces of the *Prose Collection* are 'not easy to perform, but accessible to all those who seriously want to do them'. 'Play' (Example 6), in particular, is in many ways just as demanding as *Pairs* yet, since it makes no specific instrumental demands, it is open to a much wider range of musicians or, as became available in the Scratch Orchestra, musically-orientated non-musicians.

Indeed, 'Play' can be taken as paradigmatic of all Wolff's work after 1956 for, like all those pieces, it too revolves around the twin performance possibilities of independent activity and activity co-ordinated with another player. There are, however, two compositions written in the period under review which involve exceptions to this rule: the already mentioned *For Pianist* and *Septet* for any seven players plus conductor (1964).

'For Pianist' and 'Septet'

Since *For Pianist* is a solo piece, it must inevitably forego any possibility of interaction between performers; yet Wolff manages to substitute a similar sort of indeterminacy to that produced when one player in an ensemble is waiting for another to provide a cue by creating situations in which a specified action may have a number of different results. Example 7 shows three different events, of which only one is performed. The decision as to which event is chosen depends on the outcome of a 'hard as possible' pizzicato: the notation for each event is preceded by a description of one of the three possible results of the attempt on this. For Wolff this was

Example 6 'Play' (from *Prose Collection*) (extract)

Play, make sounds, in short bursts,
clear in outline for the most part;
quiet; two or three times move towards
as loud as possible, but as soon as you
cannot hear yourself or another player
stop directly. Allow various spaces
between playing (2, 5 seconds, indefinite);
sometimes overlap events. One, two,
three, four or five times play a long sound or
complex or sequence of sounds.. Sometimes
play independently, sometimes by co-ordinating:
with other players (when they start or stop
or while they play or when they move) or a player
should play (start or, with long sounds,
start and stop or just stop) at a signal (or
within 2 or five seconds of a signal)
over which he has not control (does not
know when it will come). At some
point or throughout use electricity.

> partly a reaction to Tudor, who would always work out a piece fully beforehand . . . for each possibility I prescribed a different continuation, so that he could not know in advance what he'd find himself doing.[20]

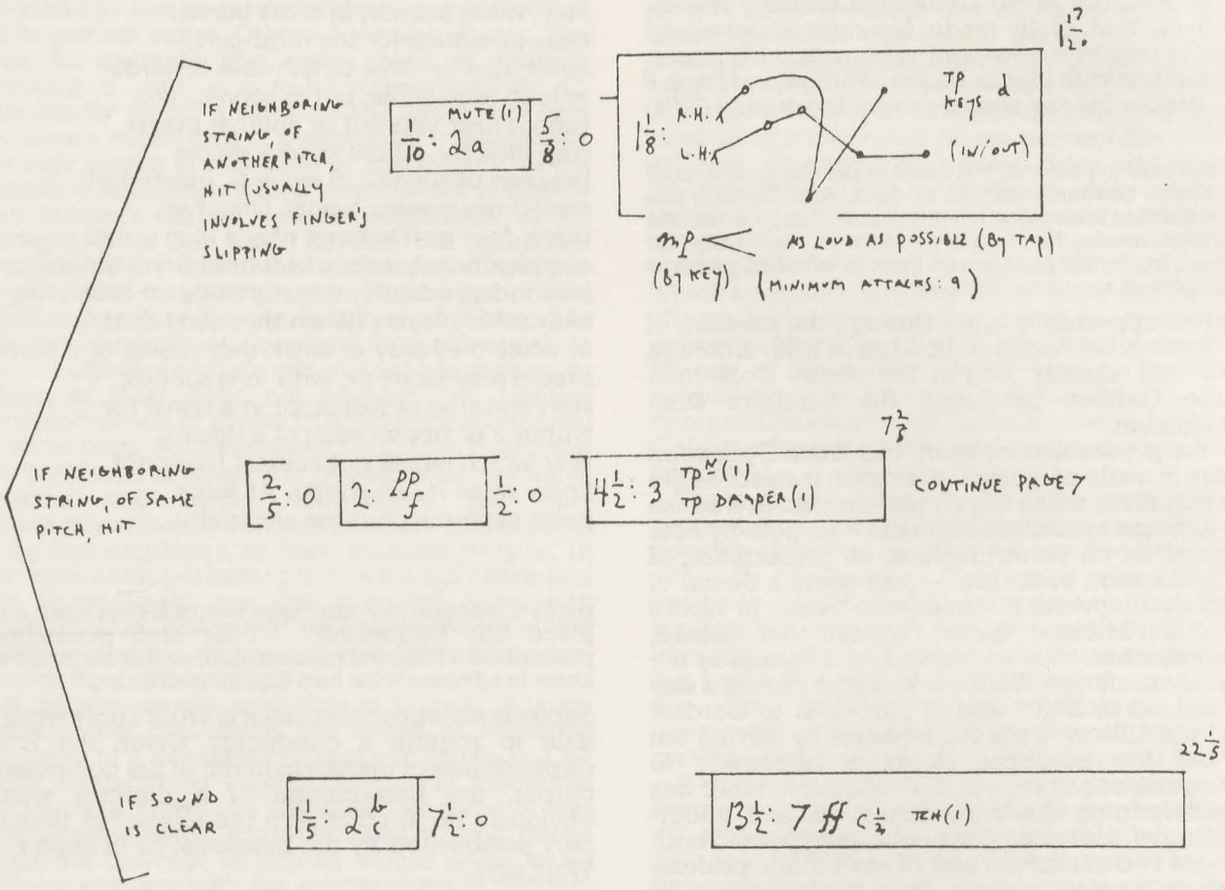
Septet is exceptional in that it is Wolff's only work to date to require a conductor. Given the interdependence of players in much of the composer's output, the introduction of a director would obviously be at odds with the ensemble democracy established by the notations; so in *Septet*, as Wolff says,

> the conductor . . . made signs, signals for the players, which either fitted or they didn't. If a performer was waiting for a signal, and the conductor happened to make a sign just then, he would react to the sign. But equally well it could be that he conducted something which at that moment had no meaning for the players, it was simply a theatrical gesture. It is really almost the only theatrical thing that occurs in my music, [the only thing] which is purely visual and which creates no sound.[21]

Comparisons

Yet even when Wolff introduces an apparently uncharacteristic element such as the 'theatrical' conducting of *Septet*, this is still rooted in musical practice. What is striking about all Wolff's work, especially the indeterminate pieces of the 1950s and 1960s, is its basis in sound and in the ways that musicians work together to make sounds. Earlier it was demonstrated that Wolff first introduced indeterminate elements in his work for practical reasons – to speed up the composition process – and then developed these elements in response to the success of this fortuitous experiment. In contrast, the indeterminacy of composers like Boulez or Brown was inspired as much by the visual or literary arts as by musical considerations. For Brown, one of Wolff's colleagues in the early years, indeterminacy or aleatoricism meant that music was 'finally catching up with . . . the "open reading" of *Le Livre* of Mallarmé . . . the endless contextual, pre-ordained but unforeseeable mobility of elements of a Calder'.[22] The weakness of drawing analogies between music and other arts, but especially between music and one of the sculptor Alexander Calder's mobiles, is that we perceive the two in such radically different ways. Although there is a superficial resemblance – both change

Example 7 *For Pianist*, page 4 (extract)



over time – the constituent parts of a Calder mobile are all present all the time, but those of a Brown sound mobile can only be heard in sequence, and the totality assessed, 'viewed' in the mind's ear, only after its performance is complete.

Nor does Wolff ever confront his performer with graphic or verbal riddles. His notational developments were conceived practically and then refined in the light of performance experience so that, although his scores may bear superficial resemblances to the graphic fantasies of composers like Sylvano Bussotti, Roman Haubenstock-Ramati and Cardew, they are not an attempt to develop the score as an abstract art, as *Augenmusik*, but an attempt to produce something that provides coherent guidance to musicians in performance. Compare, for example, Cardew's *Octet '61* with Wolff's exactly contemporary *Duet II*: both scores have symbols which are derived from those of conventional music notation (note-heads, clefs) as well as those of other symbolic languages (letters, arrows, numbers), but whereas the Wolff score can be 'read', the Cardew must be 'interpreted'. Whereas Wolff gives detailed explanations as to how these symbols relate to musical activity, Cardew's instructions are of a more general and philosophical nature, summed up in the remark that

> when performed, the piece may be judged as a musical experience (sounds brought together by human agency) and thrown down the drain. No one is to blame. This piece is not gilt-edged.

Cardew, like a number of his contemporaries, seemed to be attempting to avoid the tyranny of the score (and therefore the composer) over the performer by rendering his notation ambiguous, enigmatic. Even in *Edges* for any number of players (1968) – Wolff's most graphically enigmatic score, consisting of a page of unconnected symbols – there is a second page, giving a meaning for each symbol and a short text explaining, among other things, that

> the signs on the score are not primarily what a player plays. They mark out a space or spaces . . . a player should play in relation to, in and around the space thus partly marked out.

Just as Wolff's graphic practice is distinct from that of his fellow composers, so too is there a distinction between his text pieces and those of his contemporaries. The compositional path from detailed and precisely-notated scores, through scores allowing areas of choice, to text scores giving only generalised instructions was one taken by many of the avant garde in the period between the early 1950s and late 1960s. Cage went from *Music of Changes* to *Concert for Piano and Orchestra* to the *Variations* series, Stockhausen from *Kontra-Punkte* to *Refrain* to *Aus den sieben Tagen*, Cardew from *Three Winter Potatoes* to *Octet '61* to *The Tiger's Mind*, Wolff from *For Piano* to the *Duos* to the *Prose Collection*: all of them moving from a position in which the performer was a mere executant, through one in which he was expected to exercise his judgement and discretion in controlling the continuity of the music, to one in which he became a collaborator in every area of compositional decision-making, except that of initiation. What is remarkable about the *Prose Collection* is the degree of control Wolff retains over the final result. Whereas Stockhausen has felt

it necessary to produce official versions of the *Aus den sieben Tagen* pieces, to create an approved performing tradition for the work, the pieces of the *Prose Collection* will inevitably sound like music by Christian Wolff, as long as his instructions are observed conscientiously.

As with the works of this type by Stockhausen and Cardew, Wolff's text pieces represent a sort of *reductio ad absurdam* of his compositional concerns. Indeed although, like them, he produced further pieces such as *Toss* for eight or more players (1968), which carry on the methods of earlier pieces (*Spiral* (1966) and *Schooltime Compositions* (1968) are equivalents in the outputs of Stockhausen and Cardew respectively), the *Prose Collection* nevertheless marks the end of an era in Wolff's career. As he said later,

> My feeling in the fifties was that . . . everything was being done from square one . . . Every few months practically you would hear somebody doing something that had never been done before. It seemed inevitable that the situation, as it involves just sound, would exhaust itself – and I think it has. Practically everything's been done now . . . there's a desire now to come back and get reconnected to what most people have been trained for.[23]

This desire expressed itself at around the same time in the work of many composers – Cardew wrote *The Great Learning*, Stockhausen wrote *Mantra*, and Wolff wrote *Burdocks* – and for many of these composers the new element rediscovered was melody. In 'How to Kick, Pass, Fall and Run' Cage recounts a conversation with Wolff in the 1950s when Wolff said 'No matter what we do it ends by being melodic';[24] but, paradoxically, the very qualities of Wolff's indeterminate music – its aperiodicity, its sudden bursts of activity, its hesitancy – make it curiously unmelodic. Consequently, to introduce melody in *Burdocks* Wolff has to introduce some major notational changes and, to a certain extent, abandon the practices characteristic of its predecessors in favour of more conventional notation, especially for duration. The result, to quote Cage again, is a music in which 'the sounds . . . are rather often . . . in little rhythmic and/or melodic groups, which appear quite clearly as "musical" in the sense of musical conventions of the past.'[25]

The 1970s

Everything Wolff has produced since *Burdocks*, written for any instruments in 1970-1, uses much more conventional notations. While this does not invalidate the earlier music, it is the result of a shift in his aesthetic: from one which regarded musical performance as an activity in which the social interaction of musicians produced sounds, to one which intends that the sounds produced should also have an expressive content over and above their intrinsic quality as sounds themselves. The more recent music, although no longer concerned with creating situations in which sounds are produced exclusively for their own sake, has, however, retained the notion of musical performance as a dynamic, social activity. This is perhaps most notably so in *Exercises 1-14* for any number of instruments (1973-4), in which 'rhythm and speed, articulation, amplitude, color, and modes of playing are all flexible'.[26] Since all the players are attempting to play the same line in unison,

> any player may try to establish what the point of reference for unison is at any point in the course of playing. If, however, a movement by a player, say, in the direction of faster is not generally picked up by the rest, he must return to the prevailing speed.

In *Braverman Music I* and *II* for chamber ensemble (1978) a different type of ensemble democracy is required: Wolff suggests that the players should decide who

> will play any given note or phrase . . . so that a minimum version representing all the written pitches . . . is predetermined . . . the other instruments . . . are then free to double . . . any of these notes. In other words, these other instruments are free to provide a further orchestration.[27]

It is in these pieces written since 1972 that Wolff has to some extent parted company with the composer to whom he was perhaps closest, John Cage. In a footnote to his remarks on Wolff in *For the Birds* Cage says,

> I admire the recent music too but not its concern with power, with political subject matter.[28]

Yet it could be argued that the recent music's attempts at the expression of political ideas does no more than externalise the internal 'democracy' of the earlier music. In this, Wolff's music has always been at odds with that of Cage, for although both composers shared the aim of letting sounds be themselves, of giving 'musical' sounds no more, no less significance than 'natural' sounds, performance practice in their music is quite different. Cage's instruction in the score of *Variations II* that notations should 'refer to what is to be done, not what is to be heard' is Wolff-like, but nowhere in Cage's indeterminate music are players required by these notations to co-operate with one another. In Cage, the performer is bound by the clock or, in *Concert* and *Atlas eclipticalis*, by a conductor impersonating a clock; his experience is essentially an isolated one without even the severely circumscribed ensemble sense of traditional orchestral playing. It is this, surely, which has led to the outbreaks of 'foolishness' in Cage's large ensemble pieces. When Cage says of the disastrous 1958 Cologne performance of *Concert* that he 'must find a way to let people be free without their becoming foolish'[29] he misses the point: the sounds may have been freed but, for the players producing these sounds, what freedom the piece offers is for them the freedom of solitary confinement rather than that of liberation. In Wolff's music each performer has to be alert to his colleagues at all times, in order to fulfil the composer's instructions, always ready to respond to their playing. To draw comparisons with traditional western ensemble music-making, the experience of playing Cage could be seen as an impoverished version of orchestral playing, that of playing Wolff as an enhanced version of chamber music playing.

Indeterminacy in retrospect

The music I have focused on in this article is now perhaps Wolff's least well-known music, perhaps because of the very demands of co-operation that it makes, demands which may seem to require a commitment of players' time and energy out of proportion to the size of the pieces. Certainly Wolff's more recent work, with its more conventional notation, is more regularly played in Europe than the earlier pieces. At the turn of the decade, as the freedoms of the 1960s gave way to the more straitlaced manners of the 1970s, as graphic scores, proportional notation, verbal scores and intuitive

music gave way to a resurgence of conventional staff notation, it was hard to conceive of the relationship between the newest music and that which it succeeded as being anything other than reaction. But in retrospect it is clear that Wolff's revolution and its clear demonstration of the social dimension of music performance has not been without its consequences. To take an example from a music apparently quite removed from all this, Brian Ferneyhough's view of the function of his notations in the performance of *Cassandra's Dream Song* is in reality surprisingly close to that of Wolff. 'The notation,' he writes, 'does not represent the result required: it is the attempt to realise the written specifications in practice which is designed to produce the desired (but unnotatable) sound quality'.[30] 'Indeterminacy', Wolff said at very much the same time, 'was a way of producing sounds I could see no other way of producing.'[31] What he has demonstrated is that it is simplistic for composers and musicians to regard the score as an absolute picture of the music intended: until these 'instructions for performers' are in use, providing stimulation for players and listeners, they are worthless. Wolff's creative idea, as expressed in 1982, is no bad one for a composer today:

To turn the making of music into a collaborative and transforming activity (performer into composer into listener into composer into performer, etc.), the co-operative character of the activity to be the exact source of the music. To stir up, through the production of the music, a sense of the political conditions in which we live and of how these might be changed, in the direction of democratic socialism.[32]

Christian Wolff, 'Movement', *Die Reihe*, no.2 (2nd, revised, English edition, 1959), p.63. (This article was originally written in English, but first published in the original German edition of *Die Reihe*, no.2 in 1955.)

[2] Wolff, with Victor Schonfield, 'Taking Chances', *Music and Musicians*, vol.XVII, no.9 (May 1969), p.40.

[3] John Cage, 'Composition as Process, II. Indeterminacy', *Silence* (Middletown, Conn.: Wesleyan University Press, 1961; Cambridge, Mass. and London: The M.I.T. Press, 1966), pp.38-9.

[4] The exact date of this performance is a little hard to determine, as indeed is the work's date of composition. In an interview with Martin Daske in *MusikTexte*, no.4 (April 1984) pp.40-45, Wolff gives the year of the first performance as 1954; in the 1969 *Music and Musicians* article/interview with Victor Schonfield (see footnote 2 above) he gives 1956, as quoted near the beginning of the present article. To confuse matters still further, the composer's 'official' worklist in the version published in *MusikTexte*, no.4 dates the composition of *Duo for Pianists I* as 1957 and its premiere as being in the spring of that year; this seems the most likely. This piece is not, of course, to be confused with *Duo for Pianists II*, as the 'official' worklist calls it, which is the subject of discussion in the Cage quotation referenced in footnote 3. All titles of works in this article conform to those given in Wolff's own typewritten worklist compiled originally in 1977.

[5] Cage, 'Experimental Music: Doctrine', *Silence*, op.cit., p.13.

[6] Wolff, with Schonfield, 'Taking Chances', op.cit., p.39.

[7] Wolff, 'On Form', *Die Reihe*, no.7 (English edition, 1965), pp.26-31. (Like Wolff's earlier article for the journal (see footnote 1), this was originally written in English but first published in the German edition, *Die Reihe*, no.7 (1960).)

[8] Cage, 'How to Pass, Kick, Fall, and Run', *A Year from Monday* (London: Calder and Boyars, 1967), p.133.

[9] Wolff, *Duo for Pianists I*, instruction sheet.

[10] Wolff, 'On Form', op.cit., p.10.

[11] Ibid., p.30.

[12] Wolff, *For Pianist*, instruction sheet.

[13] Wolff, 'On Form', p.26.

[14] Cage, *For the Birds* (London: Calder and Boyars, 1976), p.201.

[15] Wolff in interview with Martin Daske, 'eine welt, die anders orientiert wäre', *MusikTexte*, no.4, op.cit., p.40. (This and the two later quotations from this interview have been translated for the present article by Barbara Fox.)

[16] Wolff, *Duet II*, instruction sheet. The following four quotations are also taken from this source.

[17] Wolff, *In Between Pieces*, instruction sheet.

[18] Wolff in interview with Daske, op.cit., p.41.

[19] Michael Nyman, *Experimental Music: Cage and beyond* (London: Studio Vista, 1974), p.97.

[20] Wolff, with Schonfield, 'Taking Chances', op.cit., p.40.

[21] Wolff in interview with Daske, op.cit., p.41.

[22] Earle Brown, 'Serial Music Today' (1966); reprinted in *Breaking the Sound Barrier*, ed. Gregory Battcock (New York: E.P. Dutton, 1981), p.101.

[23] Quoted in Keith Potter, 'Christian Wolff in Manchester', *Music and Musicians*, vol.XXIII, no.4 (December 1974), p.8.

[24] Cage, *A Year from Monday*, op.cit., p.135.

[25] Cage, *For the Birds*, op.cit., p.199.

[26] This and the following quotation are taken from Wolff's instruction sheet for *Exercises 1-14*.

[27] Wolff, *Braverman Music*, instruction sheet.

[28] Cage, *For the Birds*, op.cit., p.199.

[29] Cage, *A Year from Monday*, op.cit., p.136.

[30] Brian Ferneyhough, *Cassandra's Dream Song* for solo flute (1970), instruction sheet.

[31] Wolff, with Schonfield, 'Taking Chances', op.cit., p.40.

[32] Wolff, in *Contemporary Music Catalogue* (New York: Edition Peters, 1982), p.89.